Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (Canceled)
- 2. (Currently Amended): A method of treating myocardial organ dysfunction caused by ischemia comprising administering an effective amount of G-CSF or a biologically active fragment thereof to a patient who is subjected to a surgical or interventional procedure in order to obtain a result selected from the group consisting of: to improve organ function, to improve blood flow and to induce revascularization.
- 3. (Currently Amended): The method of claim 2, wherein said pharmaceutical composition or said effective amount of G-CSF or <u>a biologically active</u> fragment thereof is to be administered before said surgical or interventional procedure.
- 4. (Currently Amended): The method of claim 2, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is to be administered during said surgical or interventional procedure.
- 5. (Currently Amended): The method of claim 2, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is to be administered after said surgical or interventional procedure.
- 6. (Currently Amended): The method of claim 5, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is to be administered between 2 hours and 5 days after said surgical or interventional procedure.
 - 7. (Canceled)
- 8. (Currently Amended): The method of claim 27, wherein said myocardial ischemia is caused by hypertension, coronary artery disease (CAD), myocardial infarction, thrombo-embolic events, trauma and/or surgical procedures.

9-14. (Canceled)

- 15. (Previously Presented): The method of claim 2, wherein said ischemia causes organ defects.
- 16. (Previously Presented): The method of claim 2, wherein said surgical or interventional procedure is a procedure to regain blood flow selected from the group consisting of thrombolysis, ballon angioplasty, stenting, coronary or peripheral bypass surgery and ventriculo-coronary stenting.
- 17. (Currently Amended): The method of claim 2, wherein said pharmaceutical composition or said effective amount of G-CSF or a biologically active fragment thereof is capable of recruiting stem and/or progenitor cells.
- 18. (Previously Presented): The method of claim 17, wherein said stem cells are selected from the group consisting of CD34(+), multipotent adult progenitor cells (MAPC), endothelial progenitor cells (EPC), side population cells (SP) and lineage-negative stem cells.
- 19. (Previously Presented): The method of claim 18, wherein said multipotent adult progenitor cells are CD34(-), vascular endothelial cadherin(-) and AC133(+) and Flk1(+).
- 20. (Previously Presented): The method of claim 18, wherein said endothelial progenitor cells are CD34(+), CD31(+) and KDR(+).
- 21. (Previously Presented): The method of claim 18, wherein said cells of the side population are CD34(-)/low, c-Kit(+) and Sca-1(+).
- 22. (Previously Presented): The method of claim 18, wherein said lineagenegative stem cells are CD5(-), CD19(-), CD34(-), c-Kit(+) and Sca-1(+).
- 23. (Currently Amended): The method of claim 17, wherein said cells are recruited to the heart home to organs which harbour defects due to ischemia.
- 24. (Currently Amended): The method of claim 23, wherein said cells are capable of repairing the heart and/or regenerating said organs.

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